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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,642	09/30/2003	Kazutaka Katayama	031129	1143
23850	7590	01/11/2005		
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006			EXAMINER PATTERSON, MARC A	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,642

Applicant(s)

KATAYAMA ET AL.

Examiner

Marc A Patterson

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,619,330 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious for one of ordinary skill in the art to use a single layer structure for the hose, because a structure comprising at least one layer is claimed, and to use the fuel hose as an automotive in – tank fuel hose for installation in a fuel tank, because the application of automotive in – tank hose for installation in a fuel tank is an application for a fuel hose.

3. Claim 2 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,619,330 B2 in view of Hoeschele (U.S. Patent No. 3,954,689). Although the conflicting claims are not identical, they are not patentably distinct from each other because Hoeschele teaches that the proportion of dimer acid content is selected depending on the desired balance of properties (the optimum

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balance of properties is obtained when the short chain ester content is the stated range; column 4, lines 39 – 40) in a hose (column 6, line 62), formed by a polybutylene terephthalate (a copolyester having 1,4 butylene terephthalate units; column 4, lines 22 – 25) that is a thermoplastic elastomer (column 10, lines 46 – 47) containing a dimer acid moiety (the term ‘long chain ester units’ refers to the reaction product of dimer acid with a low molecular weight glycol, and are a repeating unit, therefore a moiety, in the copolyester; column 3, lines 6 – 12). Therefore, one of ordinary skill in the art would have recognized the utility of varying the proportion of the dimer acid moiety in the fuel hose to obtain a desired balance of properties. Therefore, the desired balance of properties would be readily determined through routine optimization of proportion of the dimer acid moiety by one having ordinary skill in the art depending on the desired end use of the product.

It therefore would be obvious for one of ordinary skill in the art to vary the proportion of the dimer acid moiety in order to obtain a desired balance of properties, since the desired balance of properties would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as taught by Hoeschele.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claim 1 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoeschele (U.S. Patent No. 3,954,689).

With regard to Claim 1, Hoeschele discloses a hose (column 6, line 62), therefore a structure, formed by a polybutylene terephthalate (a copolyester having 1,4 butylene terephthalate units; column 4, lines 22 – 25) that is a thermoplastic elastomer (column 10, lines 46 – 47) containing a dimer acid moiety (the term ‘long chain ester units’ refers to the reaction product of dimer acid with a low molecular weight glycol, and are a repeating unit, therefore a moiety, in the copolyester; column 3, lines 6 – 12); the dimer acid is present in a proportion of 3 – 30 mol% in the thermoplastic elastomer (the short chain ester content is ; with regard to the claimed aspect of the hose comprising a single layer, Hoeschele discloses that lamination of the hose is optional (the advantages are useful in various combining and laminating operations, therefore the hose is also used without lamination and therefore as a single layer; column 7, lines 16 – 20); with regard to the claimed aspect of the hose being an automotive in – tank fuel hose for installation in a fuel tank, and capable of following a deformation of the fuel tank and absorbing vibration caused by a fuel pump, because the hose disclosed by Hoeschele has the same chemical structure as the claimed hose, the properties of being usable as an automotive in – tank fuel hose and being capable of following a deformation of the fuel tank and absorbing vibration caused by a fuel pump are inherent to Hoeschele. However, the claimed aspect of the hose being ‘capable of following a deformation of the fuel tank and absorbing vibration caused by a fuel pump’ are directed to functional results of the claimed invention, rather than its structure, and are therefore given little patentable weight.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoeschele (U.S. Patent No. 3,954,689).

Hoeschele discloses a hose comprising a dimer acid moiety as discussed above.

Hoeschele fails to disclose a dimer acid moiety present in a proportion of 3 to 30 mol%.

However, Hoeschele discloses a dimer acid moiety present in a proportion of 25 – 55% by weight (the short chain ester content is 45 – 75% by weight, therefore the long chain ester content containing the dimer acid moiety is present in a proportion of 25 – 55% by weight; column 4, lines 39 – 40) and discloses that the proportion of dimer acid content is selected depending on the desired balance of properties (the optimum balance of properties is obtained when the short chain ester content is the stated range; column 4, lines 39 – 40).

Therefore, one of ordinary skill in the art would have recognized the utility of varying the proportion of the dimer acid moiety to obtain a desired balance of properties. Therefore, the desired balance of properties would be readily determined through routine optimization of proportion of the dimer acid moiety by one having ordinary skill in the art depending on the desired end use of the product.

It therefore would be obvious for one of ordinary skill in the art to vary the proportion of the dimer acid moiety in order to obtain a desired balance of properties, since the desired balance

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of properties would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Hoeschele.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497.

The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marc Patterson 1/10/05
Marc A Patterson, PhD.
Examiner
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